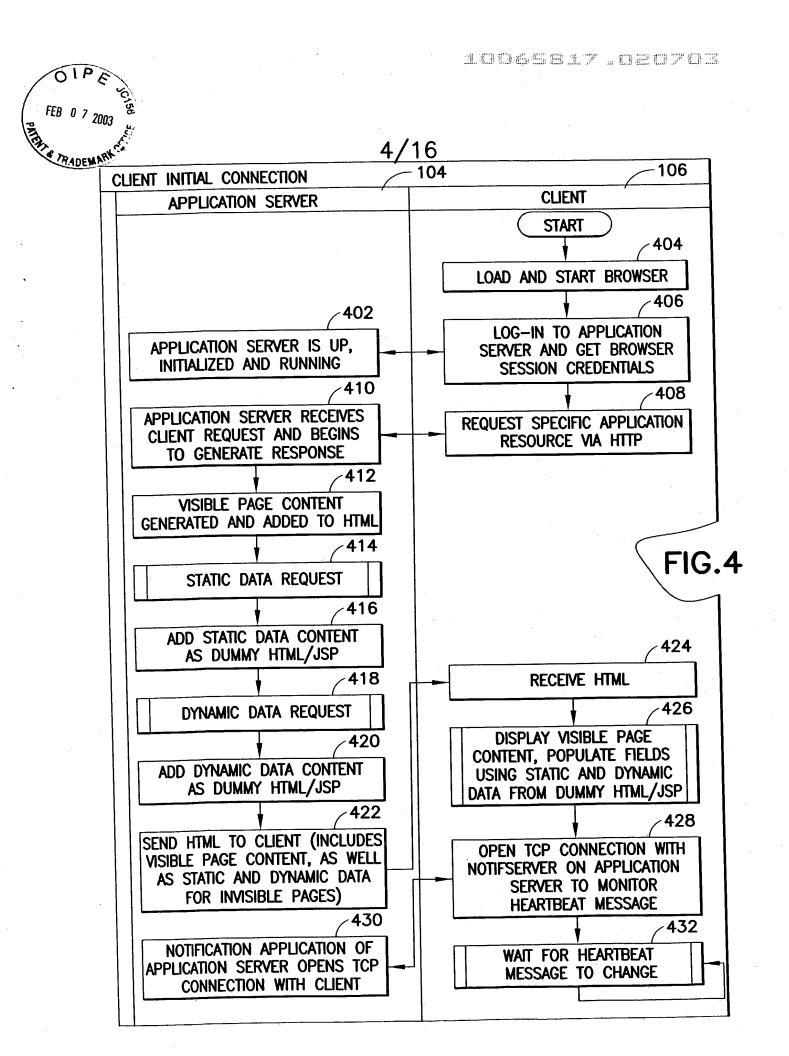


FIG.3





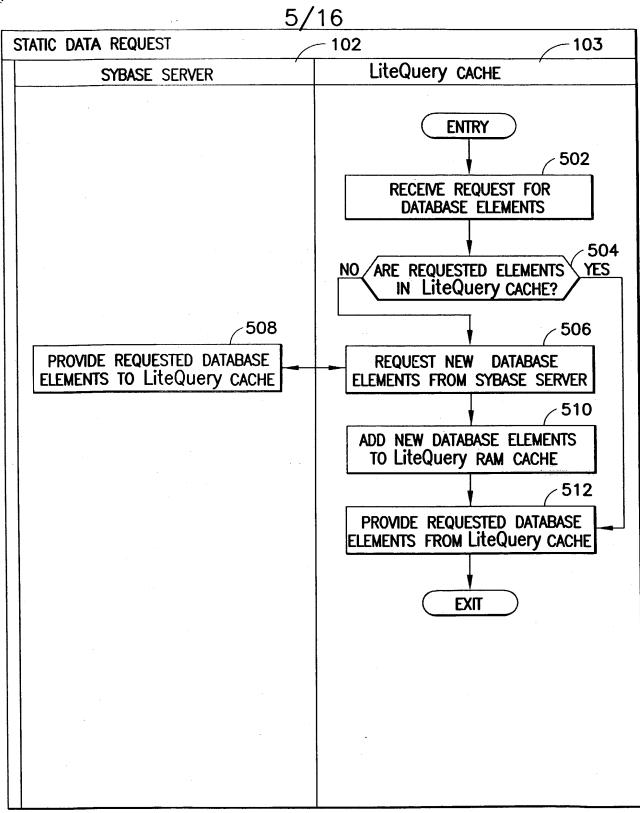


FIG.5

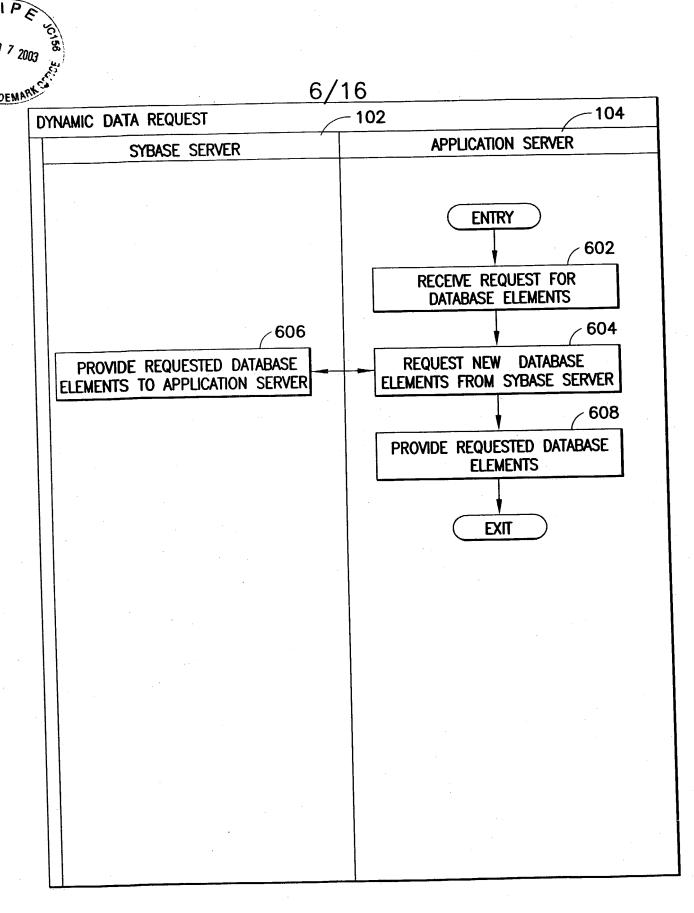


FIG.6



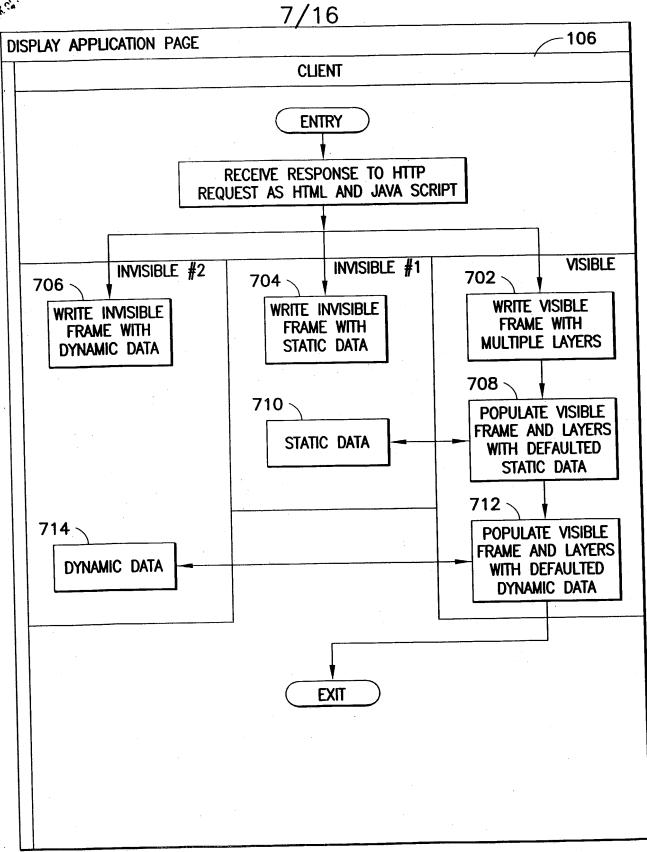


FIG.7

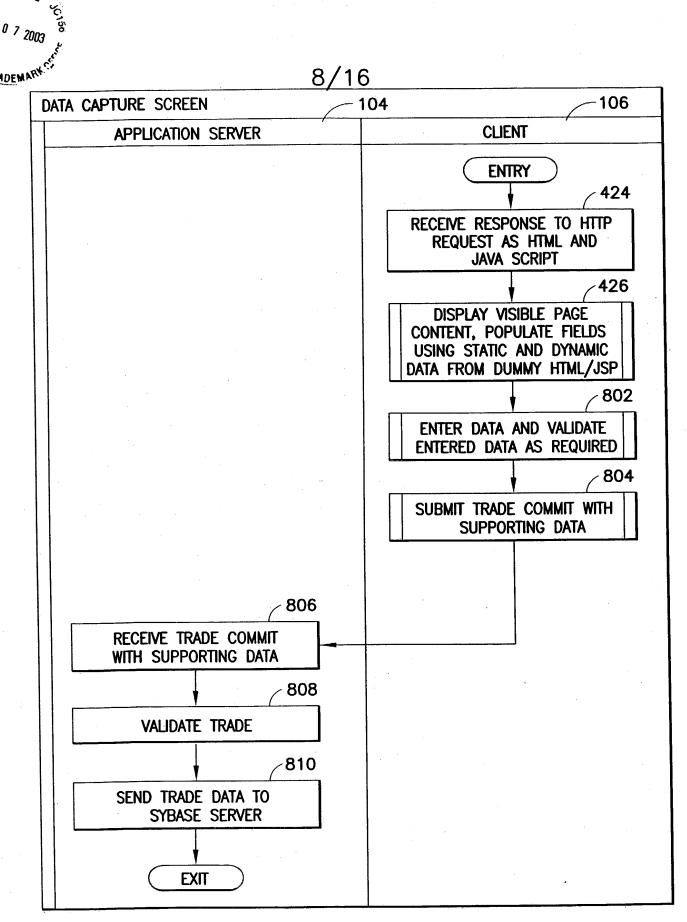


FIG.8

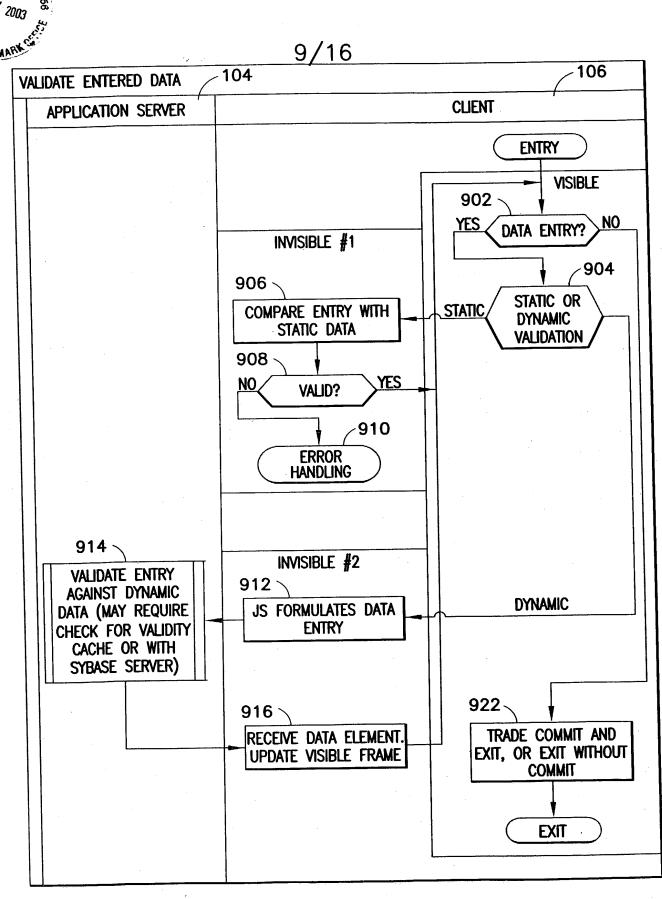


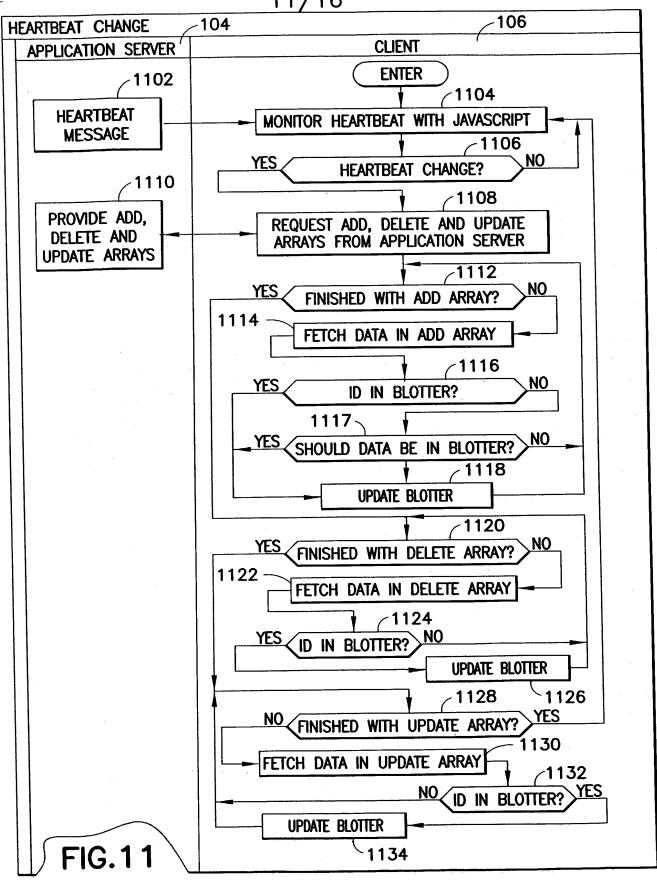
FIG.9



10/16 103 114 LiteQuery CACHE UPDATE / 102 NOTIFICATION APPLICATION LiteQuery CACHE SYBASE SERVER < 1014 **~1002** TIMER TIMER 1016 1006 1004 HEARTBEAT MESSAGE REFRESH/RELOAD LiteQuery CACHE REFRESH/RELOAD REFLECTS NO CHANGES LiteQuery CACHE 1018 1008 NOTIFICATION APPLICATION AS CHANGES TO CACHE? "CLIENT" RECEIVES CHANGE NOTICE MESSAGE FROM -1010 LiteQuery CACHE ARE ANY "CLIENTS" -1020 YES REGISTERED TO RECEIVE THREAD OF ADD, UPDATE OR **NOTIFICATION?** DELETE BEAN RUNNING ON NOTIFICATION APPLICATION **∠1012** DETECTS NOTIFICATION LiteQuery CACHE GENERATES 1022 CHANGE NOTICE MESSAGE AND NOTIFICATION MANAGER SENDS CHANGE NOTICE MESSAGE CHECKS NOTIFICATION TYPE TO REGISTERED "CLIENTS" 1024 DELETE? 1026 REFLECT DELETE IN DELETE ARRAY 1028 <u>YES</u> ADD? 1030 -1032 GET DETAILS OF ADD FROM LiteQuery CACHE, AND PROVIDE DETAILS OF ADD REFLECT ADD IN ADD ARRAY - 1034 1036 notification is an update. Get DETAILS OF UPDATE FROM PROVIDE DETAILS OF LiteQuery CACHE, AND REFLECT UPDATED DEAL UPDATÉ IN UPDATE ARRAY 1038 NOTIFSERVER ALTERS HEARTBEAT **FIG.10** MESSAGE TO CLIENT BROWSER



11/16





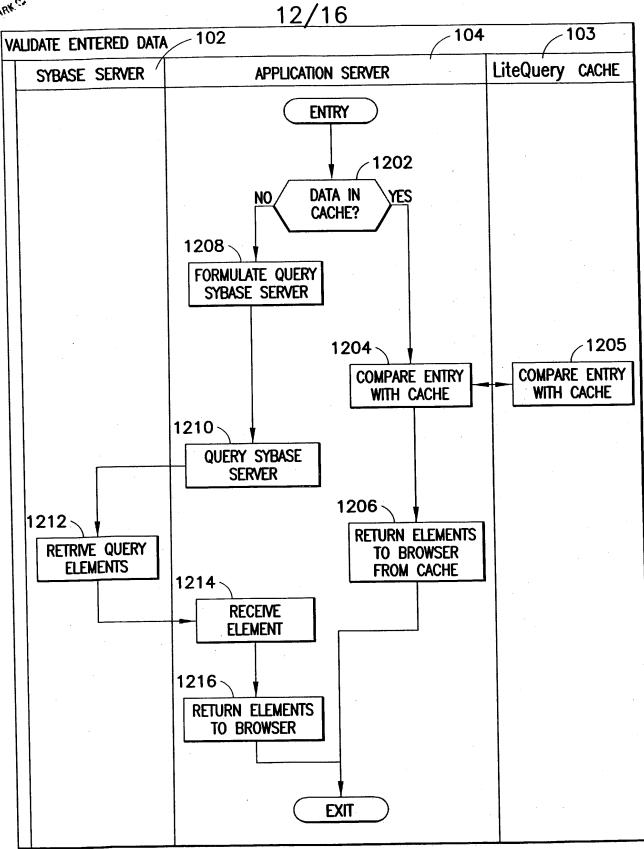
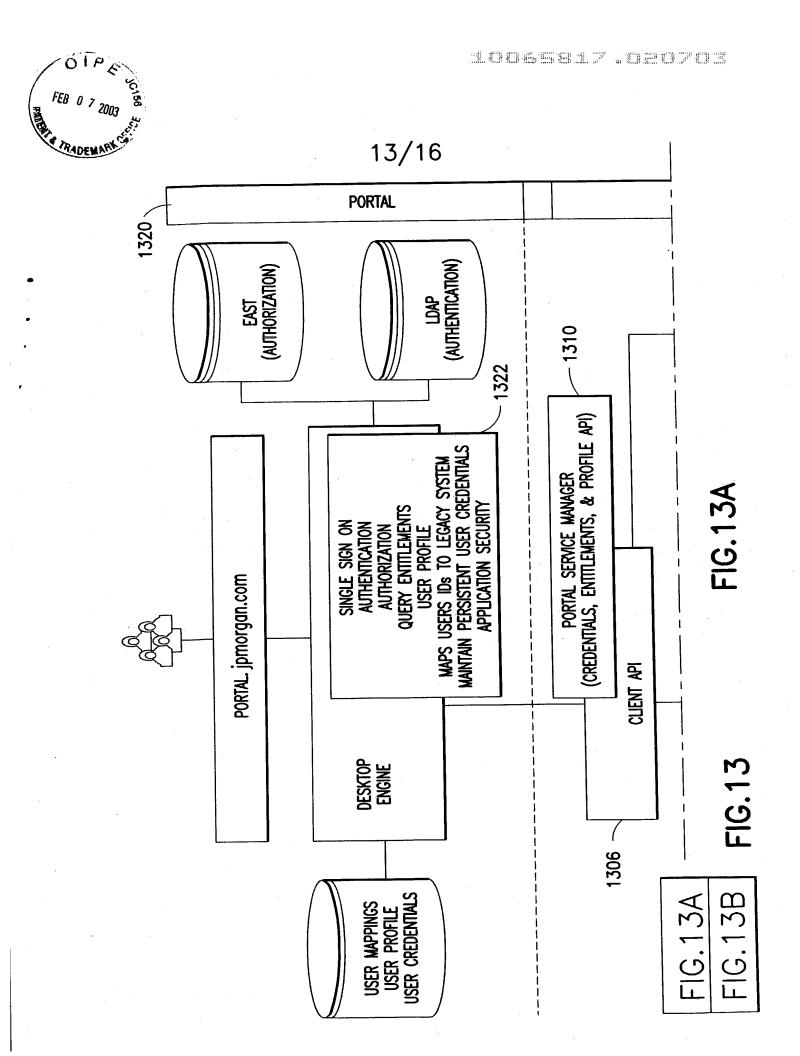


FIG.12





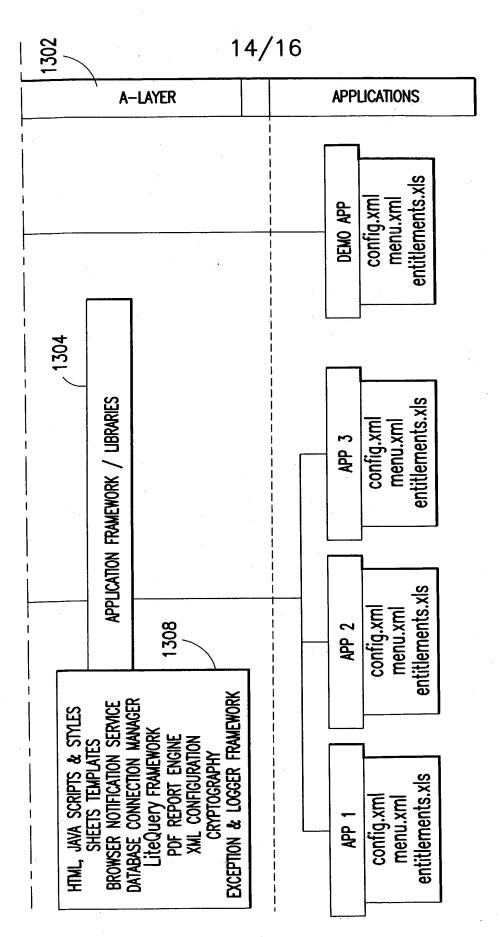


FIG. 13B

